

Amendments to the Specification

Please replace paragraph [0002] with the following amended paragraph:

The manufacture of semiconductor integrated circuits (ICs) and devices require the use of many photolithography process steps to define and create specific circuit components and circuit layouts onto an underlying substrate. Conventional photolithography systems project specific circuit and/or component images, defined by a mask pattern reticle, onto a flat substrate coated with a light sensitive film (photoresist) coating. After image exposure, the film is then developed leaving the printed image of the circuit and/or component on the substrate. The imaged substrate is subsequently processed with techniques such as etching and doping to alter the substrate with the transferred pattern. Photolithography processes are used multiple times during the fabrication of thin film ~~field-effect~~ transistors (TFTs) that are used in electro-optical display devices and sensors.

Please replace paragraph [0014] with the following amended paragraph:

A method is disclosed for forming a thin film ~~field-effect~~ transistor from a preliminary substrate having at least a silicon layer, a first dielectric layer, and a gate metal layer stacking up sequentially. A photoresist layer is formed on top of the preliminary substrate. A portion of the photoresist layer is selectively removed in a single exposure process to form a first photoresist pattern having a two-portion structure with a first portion having a first width and a second portion underneath the first portion with a second width. The gate metal layer, the first dielectric layer, and the silicon layer are reduced to have the same width as the second width. The first photoresist pattern is then reduced to form a second photoresist pattern having the first width. The gate metal layer is then made to have the same width as the first width using the second photoresist pattern. The silicon layer is doped with a predetermined impurity for forming a

source region and a drain region of a predetermined type in areas not directly underneath the reduced gate metal layer.

Please replace paragraph [0020] with the following amended paragraph:

The present disclosure describes a methodology for the effective fabrication of thin film ~~field-effect~~ transistors (TFTs) using five photolithography masks as opposed to six masks as used in conventional production flows. The electrically active transistor areas of the final completed TFT devices fabricated in accordance with the present disclosure feature regions and components that are of identical composition and dimensions as those fabricated by the conventional six-mask production flow. For simplifying the illustration, a production process for making a p-channel thin film transistor is used, but it is understood that the process is applicable to n-channel devices as well with appropriate and obvious modifications such as using different doping materials.